



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

HONDURAS.

Report from Ceiba, fruit port—Sanitary conditions and improvements.

Acting Assistant Surgeon Reynolds reports, March 19, as follows:

The death rate at this port is unusually low, even for this season of the year, malaria being the only prevalent disease and this of a light intermittent form which is readily amenable to treatment. The local authorities have graded and drained the streets in an efficient and substantial manner, have screened and are carefully inspecting every 7 days all tanks, water barrels, or other water receptacles, have cleaned vacant lots and yards of all empty cans, boxes, and broken bottles, and are enforcing an ordinance to have all water-closets oiled every 7 days. They have a small but well-ventilated detention ward which is mosquito proof, and all suspected cases of yellow fever will be taken there, should any appear.

INDIA.

Report from Calcutta—Transactions of service—Cholera, plague, and smallpox.

Acting Assistant Surgeon Eakins reports, March 7, as follows:

Week ended March 2, 1907. Bill of health issued to the steamship *Volga*, bound for Philadelphia and New York, with a total crew of 37, and to the steamship *Scharzfels*, bound for Boston and New York, with a total crew of 63. The usual precautions were taken, holds fumigated, rat guards on wharf lines and Lascars' effects disinfected.

Week ended February 23, 1907. Forty-two deaths from cholera, 27 from plague, and 48 from smallpox in Calcutta.

In Bengal and India, during the same week: 2,448 cases and 1,905 deaths, and 29,253 cases and 24,242 deaths from plague, respectively.

Plague in Calcutta in 1906—Rat destruction.

The following is received from Consul-General Michael under date of February 27:

The health officer of Calcutta, in his report for 1906, states that the spring outbreak of plague was unusually mild, resulting in less than half the number of deaths for any previous year since 1900. This was true of the other towns of Bengal. Great efforts were made in Calcutta for the destruction of rats, but it is too early to estimate whether this destruction had any influence on the character of the outbreak.

The quiescent period extended from June to December. During the last few weeks of every calendar year it has been generally noticed that the deaths from plague increase. The actual minimum of plague in Calcutta has almost always been recorded in September and October. The average weekly number of cases during the quiescent period is 15, but not a single week passes without some cases being reported.

The active period begins in January. During 1906 the active period was mild and deferred, the increase in March over February being from 98 to 143 per week. The rapid increase was deferred

6 weeks and culminated in the first week in April as usual, which was regarded as a most curious feature.

Rat destruction.—The most important measures adopted for combating plague were the destruction of rats and protection by inoculation. The chairman of the corporation issued a notice offering 8 annas (16 cents) each to all who had themselves inoculated. The results were, however, very disappointing, as only 101 inoculations were made during the year. Equally disappointing were the results of the rewards offered for live rats. Two cents were offered for every live rat and one-third of a cent for a dead rat. About 11,135 dead rats were produced, but it was found that a considerable proportion of these were picked up by coolies, and the reward for dead rats was discontinued. Of live rats only 9,447 were produced. From December 1 the reward was raised to 4 cents each, with the result that 49,386 live rats were produced. During the twelve months something like 100,000 rats were accounted for, but this, according to the report, does not seem to have had any appreciable effect on the rat population.

After much investigation it was found that 4 species of rats are found in Calcutta, in the following proportions, viz: *Mus decumanus*, 26 per cent; this rat lives in drains, cellars, etc. *Mus rattus*, 14 per cent; this is a climbing rat and lives in upper parts of houses, roofs, etc. *Nesokia bengalensis*, of the band coot species, 60 per cent; this lives chiefly in grain stores, etc. *Nesokia bandicota*, rare.

The report says "that all rats must be reckoned with as possible sources of infection and must be treated as such." The writer is not prepared, however, to accept in full the prevalent theory that the rat flea is the only medium between man and the rat for the communication of plague. He holds that the flea is the medium of infection between rat and rat, and that rat plague is almost invariably the precursor of the human plague. This, he says, is proven beyond all doubt; but that the fleas of rats dead from plague attack man with sufficient frequency and success to account for all human plague needs much more evidence than has yet been produced.

That the rat infection is the chief and paramount cause of human infection is accepted generally. Whether the medium of infection be the rat-flea or not, it is advisable to take every possible means to exterminate rats. This will be a slow and tedious task, and is more likely to be the work of a generation than of a year or two. However, extirpation of typhus fever required more than a generation, but it has been accomplished, and there is no reason to doubt that the destruction of rats will also be accomplished. Pending the extinction of rats it would be well for householders to adopt certain precautions which can be carried out at trifling expense. All drain openings should be grated; in closed courtyards openings are frequently found to allow water and sweepings to pass; these should be grated at both ends; waste-water pipes should be grated at the lower as well as the upper ends; rain-water pipes should be treated as waste-water pipes. As soon as practicable it should be compulsory to provide all grain godowns within the city limits with puka floors. Rat holes should be treated with a mixture of tar and sulphuric acid as soon as they appear. The weekly application of tar alone about drains and stables will generally keep rats away. Gates and doorways require attention when opening on courtyards, otherwise

closed in; gates should be covered with fine-meshed wire netting, and doors should fit to within one-third of an inch of the ground.

The evidence collected in Calcutta shows that *Mus decumanus* and *Nesokia bengalensis* play an important part in the diffusion of plague, while it has been proved in Australia that *Mus rattus*, even when present in considerable numbers, may be quite unimportant compared with *Mus decumanus* as the active agent of plague infection. Measures must therefore be devised against all rats, no matter what their species. Without the aid of special by-laws and regulations on the lines already laid down in Australia it seems highly improbable that ordinary measures of extermination will succeed. That the rat-flea theory can not be taken as absolutely established should no more interfere with our efforts than the probability that the goal may not be reached for many a year to come.

Plague in the Punjab.—At this time plague is raging in the Punjab, which lies in the northwestern part of India, and seems to be gaining ground. A telegram from Lahore dated February 26 says: The plague mortality of the Punjab is rising by about a thousand a week, and is more than ten times as heavy as it was at this time last year. The districts of Ludhiana, Gurdaspur, and Sialkot are the worst smitten. The following is the official statement of deaths reported from plague during the week ended February 16: The total for the province, 9,237; total for previous week, 8,110; total for the corresponding week of the previous year, 873.

ITALY.

Report from Naples—Inspection of vessels—Emigrants recommended for rejection.

Passed Assistant Surgeon McLaughlin reports, March 11, as follows:

Week ended March 9, 1907, vessels inspected at Naples, Messina, and Palermo:

NAPLES.

Date.	Name of ship.	Destination.	Steerage passengers inspected and passed.	Pieces of large baggage inspected and passed.	Pieces of baggage disinfected.
Mar. 4	Sannio.....	New York....	1,700	80	2,250
5	Italia.....	do.....	911	75	1,380
6	Germania.....	do.....	1,390	95	1,550
6	Cedric.....	do.....	1,991	180	2,750
7	Città di Torino.....	do.....	1,161	30	980
8	Königin Luise.....	do.....	1,157	110	1,580

MESSINA.

Mar. 6	Italia.....	New York....	398	77	435
--------	-------------	--------------	-----	----	-----

PALERMO.

Mar. 7	Italia.....	New York....	377	381	150
7	Sofia Hohenberg.....	do.....	302	438	116